

# United States Department of Agriculture National Agricultural Statistics Service



## **Montana Sheep and Lamb Loss 2012**

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### Montana Sheep and Lamb Loss 2012

Total Loss, Cause of Death and Value of Loss

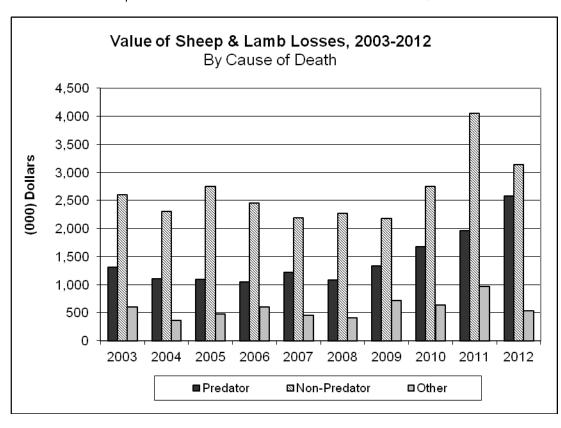
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Montana sheep and lamb producers lost 43,000 animals to weather, predators, disease and other causes during 2012, representing a total value of \$6.2 million, according to a survey conducted by USDA, National Agricultural Statistics Service, Montana Field Office. The total number of sheep and lambs lost was 5,000 head less than last year, and the total value of inventory lost was 11 percent less than a year ago. The January 1, 2012 inventory was 2 percent less than the previous year. Sheep and lamb deaths amounted to 9.6 percent of the January 1 inventory and lambs born, down 0.9 percent from last year.

The number of sheep and lambs lost to all predators totaled 18,300 head, up 4,700 head from last year. Lamb losses by all predators amounted to 14,100 head, up 37 percent from last year. The number of sheep lost to all predators totaled 4,200, up 900 head from a year ago. Predators caused an estimated \$2.6 million in losses in 2012, up 31 percent from the previous year. Losses due to predators amounted to 4.0 percent of the January 1 inventory plus lambs born and 42 percent of all sheep and lamb deaths. Coyotes remained the largest predator for both sheep and lambs. Coyotes accounted for 76 percent of the predator caused losses and 32 percent of all death losses in the state. The value of losses attributed to coyotes was \$1.9 million.

The total value of non-predatory losses was \$3.1 million in 2012, compared with \$4.1 million in 2011. Non-predatory losses accounted for 49 percent of all losses. The largest non-predatory cause of losses was lambing complications at 6,000 head. Sheep lost to non-predatory factors totaled 6,700 head, unchanged from 2011. Non-predatory lamb losses came in at 14,400 head, 7,100 head less than a year ago.

Producers reported less sheep and lambs lost to unknown causes this past year. Lambs lost to unknown causes totaled 2,500 head, compared with 4,200 head last year. Unknown causes claimed 1,100 sheep, compared with 2,000 head last year. The value of sheep and lambs lost to unknown causes decreased to \$0.5 million.



#### **Methodology and Definitions**

The sheep and lamb survey utilized multi-frame sampling procedures. The survey involved drawing a random sample from a list of livestock producers maintained by the USDA, National Agricultural Statistics Service, Montana Field Office. In addition, sheep producers living in a selected sample of area segments were interviewed. This procedure assures complete coverage of sheep producers by accounting for ranchers/farmers who may not be on the list.

Sheep and lamb loss estimates published by the USDA include sheep losses for the entire year, but include only those lamb losses that occur after docking. This special report also includes an estimate of lambs lost before docking.

#### Cooperation

This study was undertaken at the request of the Montana Wool Growers Association who also provided funding. The USDA, National Agricultural Statistics Service, Montana Field Office conducted the survey and expresses appreciation to all cooperating sheep producers.

Table 1: Sheep & Lambs: Inventory, Death Loss, and Percent of Total Inventory Lost, Montana, 2003-2012

	January 1	Lamb	All Sheep		Lamb Losses				
Year	Inventory	Crop	Losses	Before Docking	After Docking	All Lambs	Total Loss	Percent of Total Inventory Lost 1/	
		Percent							
2003	310	275	17	21	20	41	58	9.6	
2004	300	260	13	17	14	31	44	7.6	
2005	295	255	12	19	15	34	46	8.1	
2006	280	255	14	20	17	37	51	9.2	
2007	275	255	14	18	18	36	50	9.1	
2008	270	235	14	19	17	36	50	9.5	
2009	255	235	15	21	20	41	56	11.0	
2010	245	220	13	18	17	35	48	9.9	
2011	230	205	12	20	16	36	48	10.5	
2012	225	210	12	15	16	31	43	9.6	

<sup>1/</sup> Total inventory equals January 1 inventory, plus lamb crop, plus lambs lost before docking.

Table 2: Sheep & Lambs: Death Losses by Cause and Value of Loss, Montana, 2003-2012

Year	Pred	lator Losses			Value of Losses					
	Total	Percent of Total Inventory Lost 1/	Non-Predator Loss	Unknown Causes	Predator	Non Predator	Unknown	Total		
	(000) Head	Percent	(000)	Head	(000) Dollars					
2003	17.7	2.9	33.0	7.3	1,309.2	2,608.0	605.7	4,522.9		
2004	13.7	2.4	26.0	4.3	1,102.6	2,306.2	364.3	3,773.1		
2005	12.4	2.2	28.4	5.2	1,096.4	2,755.6	477.6	4,329.6		
2006	14.1	2.5	29.6	7.3	1,044.4	2,453.7	600.3	4,098.4		
2007	17.0	3.1	27.5	5.5	1,214.4	2,189.3	458.0	3,861.7		
2008	15.2	2.9	29.2	5.6	1,078.3	2,272.6	412.7	3,763.6		
2009	18.8	3.7	28.0	9.2	1,328.3	2,185.7	713.1	4,227.1		
2010	17.3	3.6	24.9	5.8	1,676.9	2,747.9	641.2	5,066.0		
2011	13.6	3.0	28.2	6.2	1,967.1	4,057.3	971.6	6,996.0		
2012	18.3	4.1	21.1	3.6	2,574.0	3,135.0	531.0	6,240.0		

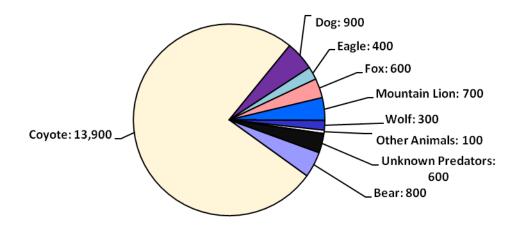
<sup>1/</sup> Total inventory equals Jan 1 inventory, plus lamb crop, plus lambs lost before docking.

Table 3: Sheep & Lambs: Death Losses by Cause, Montana 2011-2012

Table 3. Sheep & Lan			LOSS		LAMB LOSS				TOTAL LOSS			
Cause of Loss	Number of Head		Value in Dollars (000) <sub>1/</sub>		Number of Head		Value in Dollars (000) <sub>2/</sub>		Number of Head		Value in Dollars (000)	
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012
Predators												
Bear	400	400	103.6	84.0	300	400	32.4	48.0	700	800	136.0	132.0
Bobcat												
Coyote	2,500	2,700	647.5	567.0	7,300	11,200	788.4	1344.0	9,800	13,900	1,435.9	1,911.0
Dog		500		105.0	300	400	32.4	48.0	300	900	32.4	153.0
Eagle	100		25.9		900	400	97.2	48.0	1,000	400	123.1	48.0
Fox					700	600	75.6	72.0	700	600	75.6	72.0
Mountain Lion	100	300	25.9	63.0	200	400	21.6	48.0	300	700	47.5	111.0
Wolf	100	100	25.9	21.0	100	200	10.8	24.0	200	300	36.7	45.0
Other Animals					200	100	21.6	12.0	200	100	21.6	12.0
Unknown Predators	100	200	25.9	42.0	300	400	32.4	48.0	400	600	58.3	90.0
Total Predators	3,300	4,200	854.7	882.0	10,300	14,100	1,112.4	1,692.0	13,600	18,300	1,967.1	2,574.0
Non-Predators												
Total Diseases	1,300	1,000	336.7	210.0	3,800	3,300	410.4	396.0	5,100	4,300	747.1	606.0
Lambing Complications	900	800	233.1	168.0	3,600	5,200	388.8	624.0	4,500	6,000	621.9	792.0
Old Age	2,100	2,700	543.9	567.0					2,100	2,700	543.9	567.0
On Back	300	200	77.7	42.0	100		10.8		400	200	88.5	42.0
Poison	300	400	77.7	84.0	300	500	32.4	60.0	600	900	110.1	144.0
Theft	100		25.9		300		32.4		400		58.3	
Weather Conditions	1,300	900	336.7	189.0	11,800	4,700	1,274.4	564.0	13,100	5,600	1,611.1	753.0
Other	400	700	103.6	147.0	1,600	700	172.8	84.0	2,000	1,400	276.4	231.0
Total Non-Predators	6,700	6,700	1,735.3	1,407.0	21,500	14,400	2,322.0	1,728.0	28,200	21,100	4,057.3	3,135.0
Unknown Causes	2,000	1,100	518.0	231.0	4,200	2,500	453.6	300.0	6,200	3,600	971.6	531.0
Total Loss	12,000	12,000	3,108.0	2,520.0	36,000	31,000	3,888.0	3,720.0	48,000	43,000	6,996.0	6,240.0

<sup>1/</sup> Using average reported value for Ewes 1+.

## Sheep and Lamb Loss by Predators 2012



<sup>2/</sup> Using average reported value for Market lambs under 1 year.

<sup>--</sup> Denotes less than 100 head.

Table 4: Sheep & Lambs: Percent of Death Losses by Cause, Montana, 2003-2012

Cause of Loss	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Predators										
Bear	1	2	1	1	1	2	1	2	2	2
Bobcat										
Coyote	20	21	19	20	23	20	26	25	20	32
Dog	2	2	1	1	2	1	1	2	1	2
Eagle	2	2	2	2	2	2	1	2	2	1
Fox	2	2	2	1	2	3	2	3	2	1
Mountain Lion	1	1		1	1	1	1	1	1	2
Wolf	1	1	1	1	1	1	1	1		1
Other Animals										
Unknown Predators	2	1	1	1	2	1	1	1	1	1
Total Predators 1/	30	31	27	28	34	30	34	36	28	43
Non-Predators										
Digestive	**	7	**	**	**	**	1	**	**	**
Internal Parasites	**	**	**	**	**	**	1	**	**	**
Respiratory	**	10	**	**	**	**	4	**	**	**
Metabolic	**	2	**	**	**	**	1	**	**	**
Other Diseases	**	3	**	**	**	**	3	**	**	**
Total Diseases	14	22	17	13	16	11	10	10	11	10
Lambing Complications	15	11	13	13	13	11	8	11	9	14
Old Age	6	8	7	6	6	7	5	6	4	6
On Back	2	1	2	1	1	1	1	1	1	
Poison	2	2	3	3	2	2	1	1	1	2
Theft	3		1	1	1	1		1	1	
Weather Conditions	11	12	15	18	14	23	24	18	27	13
Other	5	3	5	3	2	3	2	3	4	3
Total Non-Predators <sub>1/</sub>	57	59	62	58	55	58	50	51	59	49
Unknown Causes	13	10	11	14	11	11	16	12	13	8
Total Loss 1/	100	100	100	100	100	100	100	100	100	100

<sup>1/</sup> Totals may not add due to rounding.

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<sup>--</sup> Denotes less than 1 percent. \*\* Not Available.